

COPD

Chronic Obstructive Pulmonary Disease

What is COPD?

Chronic Obstructive Pulmonary Disease, also known as COPD, is comprised of a set of lung diseases that limits air flow and is not fully reversible. It is usually progressive and is associated with inflammation of the lungs as they respond to harmful particles or gases. Treatment is available. COPD can be prevented by taking proper precautions and avoiding triggers.

Two major types

Chronic Bronchitis

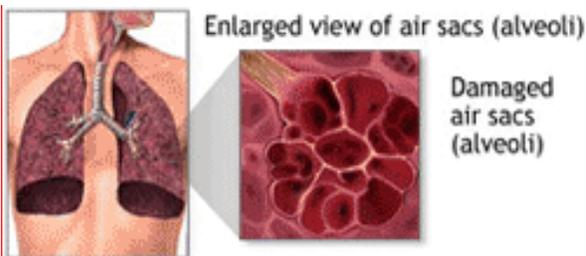
- Characterized by the presence of chronic inflammation and excess mucus production and the presence of a chronic productive cough.

It is estimated that 14 million people in the U.S. suffer from this disorder.

Emphysema

- Characterized by damage to the small, sac-like units of the lung that participate in the delivery of oxygen and removal of carbon dioxide from the lung.

It is estimated that 2 million individuals in the U.S. suffer from this disorder.



Cigarettes contain many hazardous substances that damage the lungs when inhaled



ADAM

Symptoms of chronic bronchitis and emphysema:

The symptoms of chronic bronchitis and emphysema are similar.

Chronic Bronchitis	Emphysema
Chronic cough	Chronic cough
Shortness of breath	Shortness of breath
Frequent clearing of throat	Limited activity level
Increased mucus	

What can cause COPD?

The primary risk factor for COPD is smoking. Long-term smoking is responsible for 80-90% of cases. A smoker is 10 times more likely to die of COPD than a non-smoker.

Other risk factors include:

- Childhood respiratory infections
- Genetic make-up
- Increasing age
- Prolonged exposure to harmful particles and gases (secondhand and industrial smoke, chemical gases, vapors, mists and fumes, and dusts from grains, materials and minerals)

How common is COPD?

- About 13.9% of the U.S. adult population, ages 25 and older, have been diagnosed with COPD
 - » 15 – 19% of COPD cases are work-related
- 24 million other people have evidence of troubled breathing, indicating COPD is under diagnosed by more than 60%

Smoking cessation is critical for all severities of COPD.

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What do we know about COPD in the mining industry?

Studies show:

- An increased number of cases of chronic bronchitis in coal and gold miners
- Long-term exposures to low levels of silica may lead to the development of chronic bronchitis and emphysema
- Chronic exposure to coal dust, particularly high levels, can cause severe emphysema

How is COPD prevented or its progression slowed?

- Avoid exposure to second-hand smoke and other harmful substances in the air
- Stop smoking to prevent further damage

How is COPD treated?

Treatment is different for each individual. It is based on severity of symptoms.

Early diagnosis and treatment can:

- Slow progress of the disease
- Relieve symptoms
- Improve an individual's ability to stay active
- Prevent and treat complications
- Improve quality of life

Medications used to treat COPD symptoms or to decrease the risk for complications include:

- Bronchodilators - to relax the muscles around the airways
- Steroids - to reduce inflammation
- Oxygen therapy - to help with shortness of breath
- Annual flu vaccine - to reduce the risk of the flu and its complications
- Pneumonia vaccine - to prevent a common cause of pneumonia

When is it important to see a doctor?

- When first experiencing shortness of breath or other lung symptoms
- If symptoms get worse

Seek emergency medical treatment if:

- Breathing suddenly becomes more difficult

Note: If you are currently diagnosed with COPD, see your doctor 1-2 times a year to review treatment plan.

Resources on the Internet

- www.lungusa.org
- www.nhlbi.nih.gov/health/COPD
- www.emphysema.net

References

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